

III. REMARKS

Status of the Claims

Claims 1,14, 28 and 30 are amended. Claims 27 and 29 are cancelled. Claims 1, 3-14, and 16-26, 28 and 30 are presented for further consideration.

Summary of the Office Action

Claims 1,3,4,5,10,11, 14-18, 23, 24, and 27-30 stand rejected stand rejected under 35USC103(a) on the basis of the cited reference Verdonk, U.S. Patent No.6,330,454 in view of newly cited reference Jones, U.S. Patent No.6,748,320. Claims 6-9, and 19-22, stand rejected under 35USC103(a) based on the reference Verdonk in view of the cited reference Jones and further in view of Willars, et al, U.S. Patent No. 6,285,667. Claims 12, 13, 25, and 26 stand rejected under 35USC103(a) based on the reference Verdonk. The Examiner is respectfully requested to reconsider his rejection in view of the above amendments and the following remarks.

Applicant has amended the claims to overcome the Examiner's objections and to reply to newly cited art.

These amendments are submitted after final rejection in order to place the claims in condition for allowance or in the alternative to place the claims in better condition for appeal. The Examiner is respectfully requested to enter these amendments in order to advance the prosecution of this application.

In rejecting the claims, the examiner has cited, for the first time, the reference Jones as a basis for the obviousness rejections. The citation of this new reference was not necessitated by Applicant's prior amendments and accordingly the issuing of final rejection is improper under MPEP section 706.07(c) where it is stated:

"While the rules no longer give to an applicant the right to "amend as often as the examiner presents new references or reasons for rejection," present practice does not sanction hasty and ill-considered final rejections. The applicant, who is seeking to define his or her invention in claims that will give him or her the patent protection to which he or she is justly entitled should receive the cooperation of the examiner to that end, and not be prematurely cut off in the prosecution of his or her application."

The Examiner is respectfully requested to reconsider the final nature of the pending office action and his rejection in view of the above amendments and the following arguments. The entering of the above amendments will permit the clarification of the issues for appeal or the allowance of the claims. They are intended to resolve any remaining issues with respect to claims 1, 14, 28 and 30 and to thereby simplify the issues should an appeal be taken. We believe that such amendments are properly entered under 37USC1.116

Discussion of the Cited Reference

The Examiner continues to rely primarily on the cited reference Verdonk to support the rejection based on obviousness.

The Examiner has indicated that he has applied a broad interpretation of the phrase relating to timing information in the claim language. Applicant has amended independent claims 1 and 14 to indicate that the timing information comprises a timing advance factor or the round trip time. The time stamp of Verdonk is not related to location, but only indicates the time a location estimate is made. It cannot be used as an indicator of location in the manner in which a timing advance factor or round trip time can be used. The disclosure of the reference Jones does not remedy this deficiency.

As previously stated, Verdonk discloses a wireless communication system 100 that is connected to a packet data network 112. The mobile switching centers (MSC) 102 and 116 require an Interworking function to interface with the packet data network 112. A

mobile unit may be located by paging it with standard paging techniques (column 8 lines 26-28). The serving MSC identifies the cell/sector in which the mobile unit operates and converts that information to an approximation of the longitude and latitude. This approximation is based on center of the cell or sector identified (see column 6, lines 20-40) and other factors, such as a main travel route through the cell (column 8, lines 41-65). The serving MSC then returns this location information (longitude and latitude estimate) along with a time stamp via the HLR or directly to the SCP (see column 6, line 65-column 7, line 6). It should be noted that this date stamp gives no information from which location can be determined, it merely identifies the time that a particular location determination was made.

Because of the basis on which the location estimate is made in the reference Verdonk, the location reference obtained is not very reliable. This is typical of the prior art as described in this application. As shown in Figures 6A and 6B of Verdonk, the location is assumed to be in the center area of a cell/sector, or on a midway point on a highway within the cell, or in a significant structure such as a mall within the cell. This is a rather arbitrary basis and may have little relationship to the actual location of the subscriber terminal that is the subject of the location inquiry.

According to independent claims 1 and 14 of this application, as amended, information is provided, from which an estimate of the subscriber terminal location that is more accurate than taught by Verdonk, may be obtained. This information includes complete location estimate, cellular interface signal strength measurements, a timing advance factor or the round trip time, and measurements based on sources unrelated to a radio connection.

Verdonk does not disclose that the paging response message includes any information other than cell location that is useful in location determination. In Verdonk, MSC returns location information as longitude and latitude. This is not actual position, but it is estimated on the basis of the cell/sector information, supplemented by assumptions

relating to physical characteristics of a particular cell. It is to be noted that such location is not a very accurate one, as cell/sector may be a comparatively large area. In the present invention, the paging response message includes, besides identity of the serving cell also other information useful in location determination.

The system of Verdonk is, therefore, missing several features of the subject application according to independent claim 1 and 14, as amended.

In order to overcome the above deficiencies the Examiner has proposed to combine the disclosure of the reference Jones with the disclosure of Verdonk. In particular the Examiner likens an advance warning time set up in Jones as teaching a time advance factor. The advance warning time of Jones is a signal which is automatically sent when a truck passes an arbitrary perimeter set up by the system and is described as follows:

"In FIG. 27 a user at 1010 Oak Lane 332 has requested an advance warning time. The advance warning time is five minutes and thirty seconds 336 before XYZ Delivery Company 335 delivery truck arrives. When the vehicle crosses any locations matching notification time/s 341, shown in more detail in FIG. 28, the advance warning is activated. The only exception is a stop that is scheduled between an activation point/location and the final destination."

This is significantly different than a time advance factor of a radio communication signal. It is merely a message prompted by a vehicles passing a predetermined position.

The disclosure of Jones therefore, does not remedy the deficiencies of the teaching of Verdonk.

As previously submitted, the disclosure of the cited reference Verdonk is deficient beyond what the Examiner has indicated and these deficiencies are not remedied by the proposed combination with the teaching of the references Jones and Willars. The Examiner has cited the combined teachings of Verdonk, Jones and Willars with respect to claim 6-8, and 19-21. The system of Willars is described in column 2, lines 11-15 as follows:

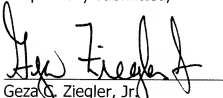
"In the preferred embodiment of the present invention, the simultaneous call connection is accomplished using a unique page procedure between the core networks, generic radio access network, and mobile station to which the simultaneous calls are destined."

This unique page procedure allows a mobile station to receive simultaneous messages from two different core networks, while employing only a single channel between the generic radio access network and the mobile station. There is no mention of a locating service that is initiated by a page from a mobile unit. The Examiner indicates that this reference, in combination with the reference Verdonk, teaches the initiation of a location request by a mobile terminal. This is speculation by the Examiner, as there is nothing in these references to support the Examiner's position. Applicant submits that the modification of the teachings of Verdonk, Jones and Willars, in order to obtain the invention, as described in the amended claims submitted herein, would not have been obvious to one skilled in the art.

For all of the foregoing reasons, it is respectfully submitted that all of the claims now present in the application are clearly novel and patentable over the prior art of record, and are in proper form for allowance. Accordingly, favorable reconsideration and allowance is respectfully requested. Should any unresolved issues remain, the Examiner is invited to call Applicants' attorney at the telephone number indicated below.

The Commissioner is hereby authorized to charge payment for any fees associated with this communication or credit any over payment to Deposit Account No. 16-1350.

Respectfully submitted,


Geza G. Ziegler, Jr.
Reg. No. 44,004

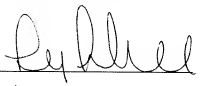
10 August 2006
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Perman & Green, LLP
425 Post Road
Fairfield, CT 06824
(203) 259-1800
Customer No.: 2512

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